

REMARKS

By this Amendment, the drawings are replaced pursuant to the attached drawing sheets, and the specification and claims 1-12, 14-16, 18-20, 22, 24 and 25 are amended, and claims 26-33 are added. Accordingly, claims 1-33 are pending. Claims 1 and 14 are amended to recite features supported in the specification, for example, at page 16, line 22 – page 18, line 8 and Figs. 9-14. Thus, no new matter is added by any of these amendments.

Applicants appreciate the courtesies extended to Applicants' representative by Examiners Strege and Johnson during the September 30, 2004 interview. In accordance with MPEP §713.04, the points discussed during the interview are incorporated in the remarks below and constitute Applicants' record of the interview.

Applicants gratefully acknowledge that the Office Action indicates that claims 5-7 and 18-20 contain allowable subject matter. As such, Applicants rewrite claims 5-7 into independent form to recite the features of claim 4 and intervening claims 1 and 3, together with 18-20 into independent form to recite the features of claim 17 and intervening claims 14 and 16. Also, as agreed during the interview, added claim 28 is also deemed patentable over the applied references of record. However, Applicants assert that all of claims 1-33 are allowable for the reasons discussed below.

Reconsideration based on the following remarks is respectfully requested.

The Office Action rejects 1-4, 8-17 and 21-25 under 35 U.S.C. §103(a) over U.S. Patent No. 6,002,800 to Donnelly et al. (hereinafter "Donnelly") in view of Applicants' Admitted Prior Art (hereinafter "the alleged APA"). This rejection is respectfully traversed.

Donnelly and the alleged APA, alone or in combination, do not teach or suggest a method for processing anti-aliased images including comparing at least one image portion of an anti-aliased input image against one or more loose-templates to produce a comparison

image, and processing the comparison image to determine whether a match condition is satisfied, as recited in claim 1, and similarly recited in claim 24. Nor do Donelly and the alleged APA teach or suggest an apparatus for processing images including at least one loose-template, and a control device that produces a comparison image based on comparing the at least one loose-template against an anti-aliased image to determine whether a match condition is satisfied, as recited in claim 14, and similarly recited in claim 25.

Donelly discloses an image detection system that detects an image in an image pixel stream. In particular, Donelly teaches a printer 4 that has a controller 6 and a print engine 7 and receives images from a scanner 2. The controller has a converter 8, and the print engine 7 has a laser driver 11 and a detection module 14. The converter 8 outputs a pixel stream 20 to the detection module 14 with a ROM 15 for storing template information of the images. See col. 4, line 40 – col. 5, line 10 and Fig. 2 of Donelly.

Donelly provides a template cell, with the cell data including two cell values that represent the boundaries of the range of values to be compared. A comparator cell 170 determines a match when the input cell data are between the template cell boundaries. The comparator array 165 is loaded with range values from a template ROM 15. See col. 15, lines 1-38 and Figs. 27 and 38 of Donelly.

In contrast, Applicants' features in the independent claims are directed to comparing an anti-aliased image against a loose-template to determine a match condition. Donelly does not teach or suggest comparison for anti-aliased images, or any motivation to modify its teachings to achieve comparison for anti-aliased images.

Further, Donelly fails to teach or suggest producing a characteristic determination from a relation between the comparison image and the template, comparing the characteristic determination against a template threshold, and determining whether a template comparison

condition is satisfied based on the threshold comparison, as provided in the new dependent claims. In particular, Donelly fails to provide a target value and a respective span for each element. In order to adjust the inclusive values range of a particular template, Donelly must adjust both boundaries in direct opposition to each other. By use of loose-templates on the other hand, and as particularly recited in the new dependent claims as the template threshold, Applicants' claims enable adjustment of the boundaries for a particular target by adjusting the span, representing only a single value to be altered to accomplish this goal. Thus, Donelly fails to teach or suggest the combination of all of Applicants' claimed features.

The alleged APA discloses input of anti-aliased image data. In particular, the alleged APA teaches (in the detailed description) that the anti-aliased data source and sink can be any known or later developed systems for transmitting, storing or displaying image data. See page 6, lines 1-6 of the specification. However, such a description does not constitute prior art, as to apply the disclosure against Applicants' claims uses mere hindsight. Further, these descriptions do not remedy the foregoing deficiencies of Donelly.

Further, there is no motivation to combine features related to image detection in a pixel stream of Donelly with data sources and sinks of the alleged APA, nor has the Office Action established sufficient motivation for a prima facie case of obviousness. Even assuming that motivation to combine the applied references is established, the combination fails to teach or suggest Applicants' claimed features.

A prima facie case of obviousness for a §103 rejection requires satisfaction of three basic criteria: there must be some suggestion or motivation either in the references or knowledge generally available to modify the references or combine reference teachings, a reasonable expectation of success, and the references must teach or suggest all the claim limitations. See MPEP §706.02(j).

In particular, the Office Action asserts that at the time of the invention, one of ordinary skill in the art would find it obvious "to input an anti-aliased image to be processed by Donelly,... concerned with high quality color copiers which would produce anti-aliased images to retain the high quality printing." Applicants respectfully disagree. Not only does Donelly fail to provide motivation to modify its teachings for processing anti-aliased images, even if such motivation were found, these teachings would not compensate for the loose-template comparison of Applicants' claimed features. Thus, Applicants submit that the Office Action fails to satisfy these requirements with the applied references of record.

In view of the foregoing, it is respectfully submitted that this application is in condition for allowance. Favorable reconsideration and prompt allowance of claims 1-33 are earnestly solicited. Should the Examiner believe that anything further would be desirable in order to place this application in even better condition for allowance, the Examiner is invited to contact the undersigned at the telephone number set forth below.

Respectfully submitted,



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Attachment:

Replacement Sheets: Figs. 11 and 14-17

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